



## **DESCRIPTION and EXTENT OF PROBLEM**

According to the 1998 303(d) List, more than 11 miles are partially supporting and more than 113 miles are not supporting in the Hiwassee River watershed due to high levels of pathogens and suspended solids caused by agricultural and urban activities. The initial targeted UWA watershed, Hiwassee River – upper reach of Oostanaula Creek subwatershed, will be focusing on pastureland and animal holding areas. Urban runoff, land disposal (failing septic systems), hydrologic modification (streambank stabilization) and construction (land development) will be added as other subwatersheds are addressed.

### **1998 303(d) LIST**

#### **WATERSHED NAME**

Oostanaula Creek (upper)  
Oostanaula Creek (lower)  
North Mouse Creek  
Cane Creek

#### **SOURCES**

agriculture  
agriculture/urban runoff  
agriculture  
failing septic systems/pasturelands

## **SUBWATERSHED ROTATIONAL PLAN**

The upper reach of Hiwassee River - Oostanaula Creek watershed will receive 319 funding through the FY-00 UWA grant. The upper reach of Oostanaula Creek subwatershed was selected because of its agricultural predominance. As the FY-00 grant progresses, the project manager, S.E. Tennessee RC&D Council, will be able to determine, with assistance from TDEC and the local technical team, which Hiwassee River subwatershed should be addressed next with UWA funding. As is common in most of the UWA watersheds, agricultural BMP activity is more advanced than other nonpoint source issues. Yet, time should demonstrate a growing level of expertise in the other nonpoint source issues, thereby allowing other subwatersheds which are less agriculturally oriented (i.e. lower reach of Oostanaula Creek) to be addressed with UWA funds.

It is important to note that while these UWA efforts are on going, the base grants will also be funding demonstration BMPs and public awareness efforts throughout the watershed. These efforts will address failing septic systems, construction, and urban runoff issues.

The next watershed to be addressed with UWA funds will be either of the predominantly agricultural North Mouse Creek or Cane Creek subwatersheds. As urban runoff and construction issues are better understood by local partners subwatersheds like the more urbanized lower reach of Oostanaula Creek would then be addressed. Once all of these subwatersheds have been addressed with sufficient BMP implementation efforts, Hiwassee River would likely be removed from the 303(d) List.



## COOPERATING PARTNERS

### Partners

City of Athens  
 Local developers & home builders  
 Local landowners  
 McMinn County government  
 Monroe County government  
 McMinn County Soil Conservation District  
 Monroe County Soil Conservation District  
 SE TN RC&D Council  
 Tennessee Department of Agriculture  
     Ag Resources Conservation Program  
 Tennessee Department of Environment & Conservation  
     Division of Ground Water Protection  
     Division of Water Pollution Control  
 Division of Water Supply  
 Tennessee Department of Health  
     Division of Lab Services  
 Tennessee Home Builders Association  
 Tennessee Valley Authority  
     Resource Stewardship Watershed Team Program  
 U.S. Department of Agriculture  
     Natural Resource Conservation Service  
 U.T. Institute of Agriculture  
 U.T. County Technical Assistance Service

### Abbreviations

SCD  
 SCD  
 RC&D  
  
 TDA-ARC  
  
 TDEC-GWP  
 TDEC-WPC  
 TDEC-DWS  
  
 TDH-DLS  
 THBA  
 TVA  
  
 USDA-NRCS  
 UTIA  
 UT-CTAS

### **Local developers & home builders**

The Athens area of McMinn County is growing with many rural areas becoming sub-urbanized. Agricultural-related problems are giving way to construction and urban runoff problems, an issue, which can be minimized if developers, contractors, and home builders make the effort to eliminate sediment loadings and high stormwater discharges.

### **Local landowners**

Landowners will be requested to participate in the implementation of BMPs by allowing the BMP to be placed on their property, contributing to the construction of the BMP through in-kind services, and maintaining the BMP for a pre-determined or indefinite period of time. These same landowners will also be required to allow others to visit the BMP once it has been fully constructed.

### **Local Governments**

As residential and commercial growth continues to take farmland of the Hiwassee River-Oostanaula Creek watershed in McMinn and Monroe Counties, their officials and residents will need to remain aware of and protect the existing Ag-related remediation work already in place. Government officials need to assume a leadership role in the nonpoint source effort by establishing water quality control measures for all construction sites and stormwater problem areas as growth continues.



City officials will be encouraged to work with local landowners and contractors to at least investigate the possibilities of installing BMPs to reduce construction and urban-related runoff. Even though initial BMPs implemented in the watershed will be of an agricultural nature, the city officials, landowners, and contractors will be provided an opportunity to learn how these BMPs can be converted to more urbanized usage.

#### **McMinn & Monroe County Soil Conservation Districts**

The SCDs are an active partner in the effort to reduce nonpoint source pollution to local waters. The SCDs can provide a significant amount of financial assistance to local water quality efforts. Through their direct interaction with the local NRCS district conservationist, the SCDs can also direct technical as well as administrative assistance to local water quality projects. The SCDs also serve as leaders in the effort to increase water quality education of the local citizens and operators.

#### **RC&D Council**

The local RC&D Council will manage the project as well as BMP implementation and public awareness. The RC&D's ability in these areas will be crucial to the generation of projects now and in the future.

## **CURRENT 319 PROJECTS**

FY-2000(UWA)      Hiwassee River Water Quality Restoration Project: Oostanaula Cr.  
RC&D

## **CURRENT MONITORING & ASSESSMENT**

TDEC-WPC five-year watershed management approach  
TDH-DLS pre- and post- BMP monitoring

## **MEASURES OF SUCCESS**

- UWA projects have been implemented in all 303(d) listed subwatersheds with a large portion of the required pollutant source sites having been addressed.
- Post BMP implementation monitoring results are indicating an overall improvement of the water quality of the streams directly affected by BMP implementation.
- The subwatersheds once 303(d) listed have been removed due to sufficient water quality improvements.



## **MILESTONES**

### **Long Term Goal 1.**

***Hold regularly scheduled meetings with stakeholders, to create new partnerships, strengthen existing partnerships and to foster greater trust, commitment and accountability.***

- **Action:** Conduct an annual priority watershed partners meeting for project coordination.  
**Lead:** TDA-NPS Program  
**Key Partners:** TDEC-WPC; USDA-NRCS; TDH-DLS; USDI-BISO; local governments  
**Year(s):** 2001-2005
- **Action:** Develop a Watershed Restoration Action Strategy.  
**Lead:** TDA-NPS Program  
**Key Partners:** TDEC-WPC; USDA-NRCS; TDEC-DWS-GWMS  
**Year(s):** 2001

### **Long Term Goal 3.**

***Restore all waters impaired by nonpoint sources that are listed on the 1998 303(d) List to the condition of fully supporting their designated uses by 2015, in cooperation with local, state and federal partners.***

- **Action:** 100% of the needed agricultural BMPs will be completed in the Hiwassee River – upper Oostanaula Creek subwatershed.  
**Lead:** RC&D, SCDs, USDA-NRCS  
**Key Partners:** TVA; TDA-NPS Program  
**Year(s):** 2005
- **Action:** 60% of the needed agricultural, septic system, and construction BMPs will have been completed in the Hiwassee River watershed.  
**Lead:** RC&D, SCDs, USDA-NRCS  
**Key Partners:** TVA; TDA-NPS Program  
**Year(s):** 2010

### **Long Term Goal 5.**

***Improve the knowledge of stakeholders and citizens concerning the origins, magnitude, and prevention of nonpoint source pollution.***

- **Action:** Develop at least two educational projects to educate the local citizens, landowners, and elected officials in the Hiwassee River- Oostanaula subwatershed.  
**Lead:** TDA-NPS Program  
**Key Partner:** TDEC-WPC; USDA-NRCS and RC&D; SCDs; TVA  
**Year(s):** 2005



## **Long Term Goal 7.**

***Use the maximum allowable percentage of funding annually to assist partners with water quality monitoring and assessment, for the duration of the 319 program.***

- **Action:** Pre-BMP implementation monitoring will have been completed in 100% of the Hiwassee River subwatersheds, while post-BMP implementation monitoring will have been completed in the Hiwassee River – upper Oostanaula Creek subwatershed.  
**Lead:** TDEC-WPC; TDH-DLS  
**Key Partners:** TDA-NPS Program; RC&D; TVA  
**Year(s):** 2005
- **Action:** 60% of the post-BMP implementation monitoring will have been completed in the Hiwassee River watershed.  
**Lead:** TDEC-WPC; TDH-DLS  
**Key Partners:** TDA-NPS Program; RC&D; TVA  
**Year(s):** 2010
- **Action:** 100% of the Hiwassee River-upper Oostanaula Creek subwatershed will be trending to fully supporting its designated uses.  
**Lead:** TDEC-WPC; TDH-DLS  
**Key Partners:** TDA-NPS Program; RC&D; TVA  
**Year(s):** 2005